

THE

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The ideal daily supplement?
The blended standard*

Vitamins			
Vitamin A	7,500 IU		
Vitamin D	550 IU		
Vitamin K	180 µg		
B-Complex vitamins			
Biotin	200 µg		
Folic acid	400 µg		
Vitamin B1	50 mg		
Vitamin B2	43 mg		
Vitamin B3	75 mg		
Vitamin B5	75 mg		
Vitamin B6	63 mg		
Vitamin B12	300 µg		
Antioxidant vitamins & nutrients			
Beta-carotene	12,500 IU		
Coenzyme Q10	45 mg		
Lipoic Acid	36 mg		
Para-aminobenzoic acid	36 mg		
Vitamin C	2,000 mg		
Vitamin E	500 IU		
Bioflavonoid Complex			
Mixed Bioflavonoids	555 mg		
Phenolic compounds	95 mg		
Procyranidolic Oligomers	75 mg		
Glutathione Complex			
n-acetyl Cysteine	56 mg		
Lipid Metabolism			
Camitine	750 mg		
Choline	59 mg		
Inositol	125 mg		
Lactubin	350 mg		
Minerals			
Boron	3 mg		
Calcium	800 mg		
Chromium	275 µg		
Copper	2 mg		
Iodine	100 µg		
Iron	23 mg		
Magnesium	450 mg		
Manganese	7 mg		
Molybdenum	63 µg		
Potassium	300 mg		
Selenium	150 µg		
Silicon	6 mg		
Vanadium	75 µg		
Zinc	23 mg		

* In Combination with Additional Supplements

People shouldn't look at supplements as a panacea or a quick fix. And some people can neglect the need for a proper diet when they're taking supplements or don't exercise regularly.

— Lyle MacWilliams

Getting a boost from multivitamins

But which ones work to support optimal health? **CHEAH UI-HOON** finds out

DO nutritional supplements only make for expensive urine? Most health-conscious adults would have heard this at least once — to take or not to take nutritional supplements. The view from the medical side has been quite conservative — saying there's no need to take extra vitamins — until a couple of years ago. For instance, the American Medical Association took an anti-vitamin stance for about 20 years. But two years ago, Harvard researchers Robert Fletcher and Kathleen Fairfield convinced the conservative Journal of American Medical Association to rewrite its policy guidelines on the use of vitamin supplements, based on a landmark review of 38 years of scientific evidence.

In two reports, the authors concluded that the current North American diet, while sufficient to prevent vitamin deficiency diseases, such as scurvy, is inadequate to support optimal health. They concluded that given today's diet, daily supplementation with a multiple vitamin is a prudent preventive measure against chronic disease.

"The medical association has undergone a sea change in terms of its stand on vitamin supplements," says Lyle MacWilliams, a biochemist and former Canadian Member of Parliament who was in Singapore recently to give a talk.

The case is very strong for taking the necessary nutritional supplementation — the body requires 17 vitamins and vitamin-like substances, a diverse group of plant-based antioxidants, at least 14 trace elements and minerals and several compounds important in glutathione and lipid metabolism.

It's fine and good to note this viewpoint. But with so many choices out there, how is one to know which multivitamin brand to choose? And one of the problems, Mr MacWilliams points out, is that many retail brands are found to be

lacking because their formulas are based on information that's 40 to 50 years out of date.

"People are looking for guidance on how to prevent degenerative disease — like diabetes, heart problem and osteoporosis," he says.

Taking nutritional supplements and combining them with healthy lifestyle changes can go a long way towards preventing people getting sick in the first place, says Mr MacWilliams. "People shouldn't look at supplements as a panacea or a quick fix. And some people can neglect the need for a proper diet when they're taking supplements or don't exercise regularly."

Lifestyle, diet and nutritional supplements — these three are pillars for optimal health, he says.

Having served on an expert advisory team in Canada for natural health products, Mr MacWilliams has written a book — *A Comparative Guide to Nutritional Supplements* — which covers about 500 products in North America. "About 20 per cent of those products would be available in Singapore," he says.

Choosing the right brand

"There's a broad, and surprising, range out there, from marginal quality to excellent products," Mr MacWilliams says of the hundreds of brands available. So he decided to consolidate the best expert data out there to come up with an "ideal" standard — called the Blended Standard. "I thought it was important to come up with a scientific rationale for deciding which is the right supplementation," he says.

He compiled the daily recommended intakes from seven highly noted nutritionists for the Blended Standard (see chart) to assess which products have quality formulations. "This gives us a baseline and an analytical tool to analyse the products in the market," he says.

The top nutritionists include

Phyllis Balch, Michael Colgan and Earl Mindell — who have their own recommendations for daily nutritional intakes.

Mr MacWilliams then came up with 14 criteria against which he compared supplements in the market with the Blended Standard, criteria such as:

◆ **Completeness of nutrients:** does the product contain the full spectrum of nutrients listed in the Blended Standard and considered essential for optimal health?

◆ **Potency of nutrients:** the US Recommended Dietary Allowances (RDAs) have become de facto guidelines for nutritional intake, but it's important to understand that the RDAs represent the minimum criteria necessary to prevent deficiencies rather than optimal levels for prevention of degenerative disease. Of those nutrients found in the product, what per cent are found at potency levels meeting or exceeding 50 per cent of the potency for those nutrients in the Blended Standard?

◆ **Bio-availability:** does the product contain minerals in their most bio-available forms as amino acid chelates or organic acid complexes?

◆ **Bio-activity of Vit E:** natural Vit E is quickly absorbed into human cells whereas synthetic forms are broken down and excreted in the urine. (Tip: Look for d-alpha-tocopherols instead of d/l-alpha-tocopherols.)

◆ **Cardiac Health Triad:** does the product contain Vit E, co-enzyme Q10 and magnesium — three nutritional components important to cardiac health?

◆ **Homocysteine Reduction Triad:** does the product contain the nutritional triad of Vit B6, Vit B12 and folic acid?

◆ **Bone Health Complex:** does the product contain the nutrients shown by clinical studies to be important for optimal bone health?

◆ **Antioxidant Triad:** does the prod-

uct contain the important antioxidant triad of Vit E, Vit C and beta-carotene?

◆ **Glutathione support:** glutathione is a simple tripeptide, a small protein that consists of three amino acids — glutamic acid, cysteine and glycine.

◆ **Metabolic Support:** Chromium, Vit C, Vit E, Vit B3, Biotin, minerals like manganese and zinc. The other four criteria look at the Bioflavonoid Profile, Phenolic Compound Profile, Lipotropic factors and Potential Toxicities.

With this Blended Standard, buyers can compare the listed ingredients in a multivitamin mixture to see how close they come to it. "This could be a tool by which they make a judgment as to which are more effective multivitamins," Mr MacWilliams says. In his book, he actually rates retail brands according to the standard.

The value of nutritional supplements lies in the fact that they contain essential ingredients the body needs. "If the cell doesn't have nutritional ingredients to function, then damage begins to accelerate. Supplementation can slow down the damage," Mr MacWilliams says.

The US RDA is currently being re-examined, he says. "Now called the DRI or Dietary Recommended Intake, it's beginning to incorporate optimal supplementation rather than just the baseline requirements."

Ageing, Mr MacWilliams notes, is a reflection of the rate of oxidation in the body. "Most degenerative diseases like diabetes and osteoporosis can't be cured but they can be prevented," he points out.

Lyle MacWilliams' book, *Comparative Guide to Nutritional Supplements*, can be found at Family Health stores here. He came to Singapore at the invitation of Usana Health Sciences to give a talk.

The Daily News
Why USANA?

I built a life that the rest of the world...
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